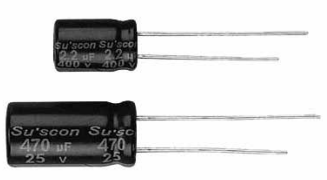
SH series

- High temperature resistance, high reliability.
- Applicable to automobile modules or lighting equipment and other high temperature applications.
- 125℃ , 2000~5000 hours long life product.
- RoHS Compliance
- 耐高溫、高信賴性。
- 適應于汽車電裝或照明設備等的高溫用途
- 125℃ 2000H~5000H長壽命品。



SPECIFICATIONS

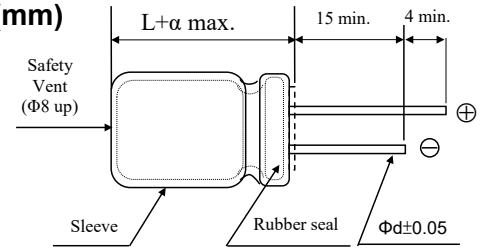
Items 項 目	Characteristics 特 性										
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20℃)										
Operating Temperature Range 適用溫度範圍	-40 ~ +125℃				-25~ +125℃						
Rated Voltage Range 額定電壓範圍	10 ~ 50VDC				160 ~ 450VDC						
Leakage Current 洩漏電流	I ≦ 0.01CV or 3 (μA) which is greater.(After 2 minutes application of DC rated voltage, at 20 ℃)				I ≦ 0.03CV +20 (μA) (After 3 minutes application of DC rated voltage, at 20 ℃)						
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20℃										
	Rated Voltage(V)	10	16	25	35	50~100	160	200~250	350~450		
	tan δ(Max)	0.20	0.16	0.14	0.12	0.10	0.15	0.20	0.20		
	When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.										
Low Temperature Stability 低温特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.										
	Rated Voltage(V)	10	16	25	35	50	63	100	160	200	250	350~450
	Z(-25℃)/Z(20℃)	3	2	2	2	2	2	3	3	3	6	6
	Z(-40℃)/Z(20℃)	8	6	4	4	4	4	4	6	6	6	-
Load Life 負荷壽命	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple currrent is applied for at 125℃.										
	Case size				ΦD≦ 8			≧ΦD10			
	Working voltage	≦50 WV			2000hours			5000hours			
		≧160 WV			2000hours						
	Capacitance Change	within ±30% of Initial Val									
	tan δ	300% or less of Initial Specified Value									
	Leakage Current	Initial Specified Value or less									
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours 125℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.										
	Capacitance Change	Within ± 25% of Initial Value									
	tan δ	200% or less of Initial Specified Value									
	Leakage Current	Initial Specified Value or less									
Standards 參照標準	IEC 60384-4 (JIS C 5101-4)										

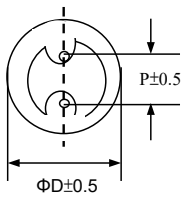
Frequency Coefficient of Permissible Ripple Current

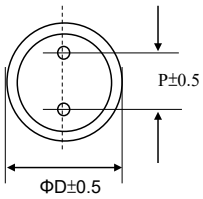
Rated Voltage (V)	Capacitance (μF)	Frequency (Hz)			
		120	1K	10K	100K
≦ 50	100	0.40	0.75	0.90	1.00
	220 ~ 470	0.50	0.85	0.94	1.00
	560~ 1000	0.60	0.87	0.95	1.00
≧ 160	4.7 ~ 150	1.00	1.40	1.50	1.55

SH series

DIMENSIONS(mm)







ΦD	6.3	8	10	12.5	16
P	2.5	3.5	5.0	5.0	7.5
Φd	0.5	0.5	0.6	0.6	0.8

α	(L < 20) 1.5
	(L ≧ 20) 2.0

STANDARD RATINGS

DxL(mm), R.C.(mA rms) at 125℃100kHz,IMP:(Ω max) at 20℃,100kHz.

Cap (μF)	V	10			16			25			35			50		
	Item	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
4.7														8x11.5	85	0.450
10														8x11.5	180	0.450
22														8x11.5	250	0.450
33														8x11.5	300	0.450
47														8x11.5	440	0.450
100					8x11.5	340	0.320	8x11.5	500	0.320	10x12.5	800	0.170	10x12.5	590	0.300
220		8x11.5	340	0.260	10x12.5	800	0.170	10x12.5	800	0.170	10x16	1050	0.120	10x20	970	0.190
330		10x12.5	800	0.170	10x12.5	800	0.170	10x16	1050	0.120	10x20	1300	0.094			
470		10x12.5	800	0.170	10x16	1050	0.120	10x20	1300	0.094						
1000		10x20	1300	0.094												

DxL(mm), R.C.(mA rms) at 125℃,120Hz

Cap (μF)	V	160		200		250		350		400		450	
	Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
4.7								10x20	53	10x20	53	10x25	50
10				10x20	110	10x20	78	10x25	85	10x25	86	12.5x20	86
22		10x20	115	10x25	126	12.5x20	128	12.5x25	139	12.5x31.5	142	16x25	154
33		10x25	154	12.5x20	157	12.5x25	171	16x25	189	16x25	189	16x31.5	203
47		12.5x20	187	12.5x25	204	16x25	225	16x31.5	243	16x31.5	243		
68		12.5x25	245	16x20	250	16x31.5	292						
100		16x25	329	16x25	329								
150		16x31.5	434										